

AMENDMENT UNDER 37 C.F.R. § 1.111
Application Serial No. 10/795,961
Attorney Docket No. Q80324

REMARKS

Claims 1-3 are all the claims pending in the application. Upon entry of the present Amendment, claims 1-3 are amended. No new matter is presented.

Initially, Applicant notes that the Examiner has not indicated acceptance of the drawings filed on May 17, 2004. Thus, the Examiner is requested to indicate acceptance of these drawings in the next action.

In the Office Action, the Examiner rejects claim 1 under 35 U.S.C. § 102(b) as being anticipated by Takashima (U.S. Patent No. 6,352,045) and rejects claims 2-3 under 35 U.S.C. § 103(a) as being unpatentable over Takashima in view of Carroll et al. (U.S. Patent No. 5,347,263, hereinafter “Carroll”). These grounds of rejection are traversed.

With respect to claim 1, Applicant submits that Takashima fails to teach or suggest all the features of this claim. For instance, claim 1 defines an engine control apparatus comprising, *inter alia*, a switch case fixed to a handle bar, a stop switch body formed in the switch case, a stop switch knob formed in the switch case that abuts with the stop switch body to activate the stop switch body to allow an engine to stop or to be in an idling state, a lock plate insertable to the stop switch knob, a transponder provided at the lock plate that transmits a predetermined ID code, and a control section that receives the ID code transmitted from the transponder and that controls the engine operation based on the ID code. Further, the control section comprises an antenna that receives the ID code that is transmitted from the transponder and a communication circuit that processes the ID code, wherein the antenna and the communication circuit are provided on a common substrate within the switch case.

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Applicant submits that Takashima fails to teach or suggest at least the feature of the claimed control section. For example, Takashima merely teaches that a “communications device 86” is disposed within a kill switch assembly so as to be positioned within the vicinity of a transponder. *See* Takashima at col. 5, lines 53-57 and col. 6, lines 50-53. However, Takashima teaches that the communications device is “constructed of an antenna coil”. Thus, there is no teaching or suggestion by Takashima of a control section which includes both an antenna and a communications circuit, as claimed, which are provided on a common substrate within the switch case. Rather, the teaching of Takashima is limited to an antenna disposed within a kill switch assembly, as evidenced by the disclosure and clearly depicted in Figure 3.

Accordingly, Takashima fails to anticipate all the limitations of claim 1, and reconsideration and withdrawal of the rejection is requested. Further, claims 2-3 are believed to be allowable at least by virtue of depending from claim 1.

In addition, Applicant submits that neither Takashima nor Carroll, whether taken alone or in combination, teaches or suggests all the limitations of claims 2 and 3. For instance, the Examiner concedes that Takashima fails to disclose a substrate in the switch housing. *See* Office Action at page 3. However, the Examiner alleges that Carroll teaches this feature, and further alleges that it would have been obvious “to mount all the authentication components of Takashima upon a common substrate. Applicant respectfully disagrees.

As discussed above, Takashima merely teaches that an antenna is disposed within a kill switch assembly. *See* Takashima and Figure 3 and col. 5, lines 8-10 and 66-67. Carroll teaches that an identifier 40 includes a single chip microprocessor, an antenna coil, a diode peak detector

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45, a multi-stage band pass amplifier 46, and an I/O interface, which may be mounted on a common circuit board. *See Carroll at col. 7, lines 60-65 and col. 11, lines 58-64.*

However, Carroll does not suggest any modification of an antenna coil disposed in a kill switch assembly, such as the antenna coil taught by Takashima, to incorporate “all the authentication components” on a circuit board. Indeed, the Examiner has cited to no portion of Carroll in support of this alleged motivation, nor does the Examiner provide any explanation as to how the antenna coil of Takashima could be modified to include “all the authentication components.” Rather, the Examiner merely provides a conclusory opinion that the combination of Takashima and Carroll would “improve reliability of the device”. *See Office Action at page 3.*

Applicant submits that this conclusory opinion is insufficient to establish *prima facie* obviousness. Moreover, the lack of any objective evidence that the antenna coil of Takashima could be modified in the manner suggested, as well as the lack of support within the actual disclosure of Carroll, strongly suggests that the Examiner has relied solely on insight gleaned from the Applicant’s disclosure to provide a suggestion to combine these teachings. Thus, the Examiner’s combination of Takashima and Carroll is based on impermissible hindsight reasoning and the rejection of claims 2 and 3 is improper.

Additionally, Applicant notes that neither Takashima nor Carroll, whether taken alone or in combination, teaches or suggests the “penetrated hole” structure of the substrate, as defined by claim 2. As discussed above, Takashima merely teaches an antenna coil, and Carroll provides no suggestion for a substrate having the claimed structure.

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Accordingly, reconsideration and withdrawal of the rejection of dependent claims 2 and 3 is requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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